Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Yelahanka Division

Name of Work: Providing pipeline to RO Plants and maintenance of Existing Borewells in ward no-04 of Yelahanka Satellite Town Sub Division

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
1	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and direction **(P.47, I. 9.4) PRED.SR 2019-20**								
	Basic Rate	3768.0							
			1				**1.00**	3768.00	**3768.00**
2	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding cost of casing pipes, collars, cap etc.,) **Page no. 46 / I. 9.1 PRED SR 2019-20**								
	Basic Rate	347.00							
	0 to 50 m		1	50.00			**50.00**	347.00	**17350.00**
	Basic Rate	442.00							
	50 to 100 m		1	50.00			**50.00**	442.00	**22100.00**
	Basic Rate	456.00							
	100 to 150 m		1	50.00			**50.00**	456.00	**22800.00**
	Basic Rate	536.00							
	150 to 200 m		1	50.00			**50.00**	536.00	**26800.00**
	Basic Rate	634.00							
	200 to 250 m		1	50.00			**50.00**	634.00	**31700.00**
	Basic Rate	700.00							
	250 to 300 m		1	50.00			**50.00**	700.00	**35000.00**
	Basic Rate	825.00							
	300 to 350 m		1	50.00			**50.00**	825.00	**41250.00**
3	Supply of ISI mark 175 mm nominal bore medium black ERW casing pipe of 5 mm thick black electric resistance continuous welded mild steel tube material confirming to IS 1387 / 1993 & manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mts both ends threaded confirming to IS 554 / 1985, one end fixed with a socket and the other and with a plastic protection end (including of all taxes) **SE PRED III NO 84**								
		Rmtr	1	60.00			**60.00**	1325.00	**79500.00**
4	Providing and fixing in trenches galvanised / mild steel tubes (medium grade) 50mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM and testing complete as per specifications. Specification No.KBS 13.2.14 / 13.6 (P. No.92/ I. No. 13.15 KPWD SR 2018-19)								
	Basic rate	388.00							
	Area Weightage 6%	23.28							
	Total	**411.28**							
		mtr	1	320.00			**320.00**	411.28	**131609.60**
5	Providing 250mm dia PVC Pipe **BWSSB SR 17-18 PNO 133 SL NO 1.11**								

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
		Rmtr							
			1	12.00			**12.00**	**1353.00**	**16236.00**
6	Providing 175mm dia ms casing cap **page no III it no 85 pred 12-13 sr**								
		no	1				**1.00**	100.00	**100.00**
7	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990. **P. No. 7/ I No. (2.6.4) 3cx 6.0 Sqm KPWD Electrical SR 2019-20**								
		Mtr	1	650.00			**650.00**	**205.00**	**133250.00**
8	Atalanta,Suguna,CRI KIRLOSKER AND other equipment pumps 15.00 HP/11KW(30 Stage)P. No. XLII I No.43) (K.P.W.D SR 2018-19)								
		Nos	1				**1.00**	**63498.00**	**63498.00**
9	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia **(P No.40, I No. 6.1) KPWD Electrical SR 2019-20**								
		NO	1				**1.00**	**2999.70**	**2999.70**
10	Supplying and Fixing 20"x20"x2.5"polished wood board made up not less than 15mm thick plank with front plank one end providing for olding at other end fixing the same to the valve using tapered bolts and nuts, (P No. 24 No.5.6.6 KPWD Electrical SR 2019-20)								
		Each	1				**1.00**	**292.00**	**292.00**
11	Supplying of 1.1 KV LT UG cable having aluminium condutor PVC insulated shethed, EXTREDED INNER SHEATHRD galvnised steel,stirp (2CX 10Sqm.mm wire armoured) confirming IS 3975;1990(no.of strip indicated i GTP) AND extruded PVC outer sheathing armoured cable IS 1554 part 1;1998 and confirming to GTP of group.A.4 Core 16Sqmm.P No.40/ I No.6.4.4 (4 core 16 Sqmm) KPWD Electrical SR 2019-20								
		Mtr	1	30.00			**30.00**	**150.00**	**4500.00**
12	Labour charges for laying of 1.1 K.V class UG cable, in existing trench GI Pipe / stoneware pipe /on wall/on poles as required In existing trencg/duct 6 Sqmm to 16 Sqmm)P No. 41 / I No. 6.5.1 KPWD Electrical SR 2019-20								
		Mtr	1	25.00			**25.00**	**11.88**	**297.00**
13	Supplying and fixing of procelin fuse channel with e on existing wooden / panel using necessary nuts, bolts and washers , 63 Amps **(P No. 44 / I No. 5.7.3 KPWD Electrical SR 2019-20)**								
		Each	1				**1.00**	**227.00**	**227.00**
14	Providing and fixing in position 50mm nominal bore non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications **(Page No.95 Item No. 13.62 / PWD SR 2018-19)**								
	Basic rate	1269.00							
	Area Weightage 6%	76.14							
	Total	**1345.14**							
		Nos	1				**1.00**	**1345.14**	**1345.14**
15	Supplying and fixing maniature circuit breakers on existing MCB Distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, Energy cross -3 with short circuit breaking capacity of 10K And Completed wiring confirming to IEC 60898 50-63 Amps TPN **(P. No. 27 I No.5.17.9) KPWD Electrical SR 2019-20**								

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
		Each	1				**1.00**	2397.00	**2397.00**
16	Cutting of road surface for pipeline trenches and disposing of the excavated stuff as directed including barricading, danger lighting etc., in the Asphalt surface road including cost of materials, labour, HOM complete as per specifications. **(P. No.269/ I No 37.38 PWD SR 2018-19)**								
	Basic rate	449.00							
	Area Weightage 6%	26.94							
	Total	**475.94**							
		Cum	1	374.00	0.60	0.150	**33.66**	**475.94**	**16020.14**
17	KSRB 2-2 : Earthwork excavation by manual means for foundation of buildings, water supply and sanitary lines and electrical conduits etc, either in pits or in trenches 1.5m and above in width, in soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. including breaking of clods complete as per specifications. **(P. No.6/ I No 2.3 PWD SR 2018-19)**								
	Basic rate	299.00							
	Area Weightage 6%	17.94							
	Total	**316.94**							
		Cum	1	374.00	0.60	0.70	**157.08**	**316.94**	**49784.94**
18	Supplying PVC ring tight pipes conformin to IS 4980 :2000 With latest amendments and conveying to work site rolling and lowering into trenches laying true line level and prefect linking at joints testing and commissoning incuding loading and un loading at both destinations and cuts of pipes wherever neccessary including joints of PVC pipes and specificals (excluding cost of pipes)with jointing of approvel type with all labour with all lead and lift incuding encasing the pipe alround to adepth of not less then 15cms with soft gravel or selected earth availble from the excavation etc.., completed and giving necessary hydralic test to the required pressure as per IS (Contractor will make his own arrangement for procuring water for testing)(P. No.133 I No 1.4 BWSSB SR 2018-19) **63mm outer dia, 6kg/sqcm & class 5**								
		Mtr	1	374.00			**374.00**	**122.00**	**45628.00**
19	Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. includingcost of all labour complete as per specifications. P. No. 7.1/ I No. (2.11) KPWD SR 2018-19								
	Basic rate	121.00							
	Area Weightage 6%	7.26							
	Total	**128.26**							
		Cum	1	374.00	0.60	0.70	**157.08**	**128.26**	**20147.08**
20	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18 of PWD BCSR 2018-19)								
	Basic rate	1888.00							
	Area Weightage 6%	113.28							
	Total	**2001.28**							
		Cum	1	374.00	0.60	0.230	**51.61**	**2001.28**	**103290.06**
21	Supplying fully automatic **star-delta starter** unit push button type with suitable wires, 3 contactors, one adjustable thermal timer mounted on a common base plate held in steel enclosure for use on 400/440 volts 3 phase and wired after fixing to the existing wooden board for motor.Above 12.5 HP upto 25 HP (P No. 24 / I No.5.2.2 KPWD Electrical SR 2019-20)								

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
		Nos	1				1.00	8000.00	8000.00
22	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-19.1)								
	For RCC Drain	Cum							
	RO Plant water lead off								
	RO Plant - 1		1	70.00	1.10	1.00	77.00		
	RO Plant - 2		1	50.00	1.10	0.90	49.50		
							126.50	215.28	**27232.92**
	Basic Rate Rs.=	130.00							
	Add 6% A.W Rs. =	7.80							
	Sub Total =	137.80							
	8Km Lead, Loading and Unloading =(2*1.28*8)+57	77.48							
	Total Rate Rs. =	**215.28**							
23	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18)								
	For Drain	Cum							
	RO Plant water lead off								
	RO Plant - 1		1	70.00	1.05	0.15	11.03		
	RO Plant - 2		1	50.00	1.05	0.15	7.88		
	RO Plant Platform kerb								
	RO Plant - 1		1	15.00	0.20	0.10	0.30		
	RO Plant - 2		1	15.00	0.20	0.10	0.30		
	RO Plant Platform tiles								
	RO Plant - 1		1	13.50	0.75	0.15	1.52		
	RO Plant - 2		1	13.50	0.75	0.15	1.52		
							22.54	5421.90	**122196.07**
	Basic Rate Rs.=	5115.00							
	Add 6% A.W Rs. =	306.90							
	Total Rate Rs. =	**5421.90**							
24	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2 of PW, P&IWTD S.R 2018-19)								
	For RCC Drain	Cum							
	Bottom slab								
	RO Plant water lead off								
	RO Plant - 1		1	70.00	0.90	0.15	9.45		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
	RO Plant - 2		1	50.00	0.90	0.15	6.75		
	de walls								
	RO Plant water lead off								
	RO Plant - 1		2	70.00	0.15	0.60	12.60		
	RO Plant - 2		2	50.00	0.15	0.60	9.00		
							37.80		
					Net Qty.		**37.80**	7070.20	**267253.56**
	Basic Rate Rs.=	6670.00							
	Add 6% A.W Rs. =	400.20							
	Total Rate Rs. =	**7070.20**							
25	KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19)								
	Considering steel For Drain @ 60 kg / cum	Tonne		37.80	0.060	--	2.27		
							2.27	73992.24	**167814.40**
	Basic Rate Rs.=	69804.00							
	Add 6% A.W Rs. =	4188.24							
	Total Rate Rs. =	**73992.24**							
26	Providing and fixing RCC precast cover slab of 100mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	For drain cover slab	Sqm							
	RO Plant water lead off								
	RO Plant - 1		1	70.00	0.90	--	63.00		
	RO Plant - 2		1	50.00	0.90	--	45.00		
							108.00	2337.00	**252396.00**
	Data Rate Rs. =	2337							
27	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19)								
		Nos							
	RO Plant Platform								
	RO Plant - 1		1	15.00			15.00		
	RO Plant - 2		1	15.00			15.00		
							30.00		
							67.00		
							67.00	432.48	**28976.16**
	Basic Rate Rs.=	408.00							

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
	Add 6% A.W Rs. =	24.48							
	Total Rate Rs. =	**432.48**							
28	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Specification No. KSRRB M800-6. (P.No.180, I.No.24.1 of PW, P&IWTD SR 2018-19)								
		Sqm							
	RO Plant Platform								
	RO Plant - 1		1	15.00	0.30		4.50		
	RO Plant - 2		1	15.00	0.30		4.50		
							9.00	84.80	**763.20**
	Basic Rate Rs.=	80.00							
	Add 6% A.W Rs. =	4.80							
	Total Rate Rs. =	**84.80**							
29	Providing and laying/fixing cement base, precast, pre polished cement concrete, designer tiles 25mm thick for flooring conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, mortar, including cutting, griding the edge to half/full round wherever required, labour, curing complete as per specification. (P.No-112,I No-14.62)								
		Sqm							
	RO Plant Platform tiles		1	13.50	0.75		10.13		
	RO Plant - 1		1	13.50	0.75		10.13		
	RO Plant - 2						20.25	1305.92	26444.88
	Basic Rate Rs.=	1232.00							
	Add 6% A.W Rs. =	73.92							
	Total Rate Rs. =	**1305.92**							
30	BESCOM Deposite Charges	Nos	1				1.00	14000.00	14000.00
								Total Construction Cost	1786966.85
								Towards GST 12%	212756.02
								Sub Total	1999722.87
								Utility Shifting,Miscellaneous and Rounding off	277.13
								GRAND TOTAL	2000000.00

TECHNICALLY SANCTIONED FOR Rs. 20.00 Lakhs
Rupees .....Twenty Lakhs only
2019-20 14th Financial Commitment Register
Registered as CE ( ) No. 9 9
Subject to conditions contained in
enclosed memo EE ( ) No. ..... /9/
Dt..... Estimate V Sanctioned
EE/YNK/TS/24/2019/12
Dated 22/01/2020

Administrative Approval

Accorded For Rs 20 Lakhs only

Head of A/C P3293

CER NO : 95 **Dt:** 13.01.2020

Certificate

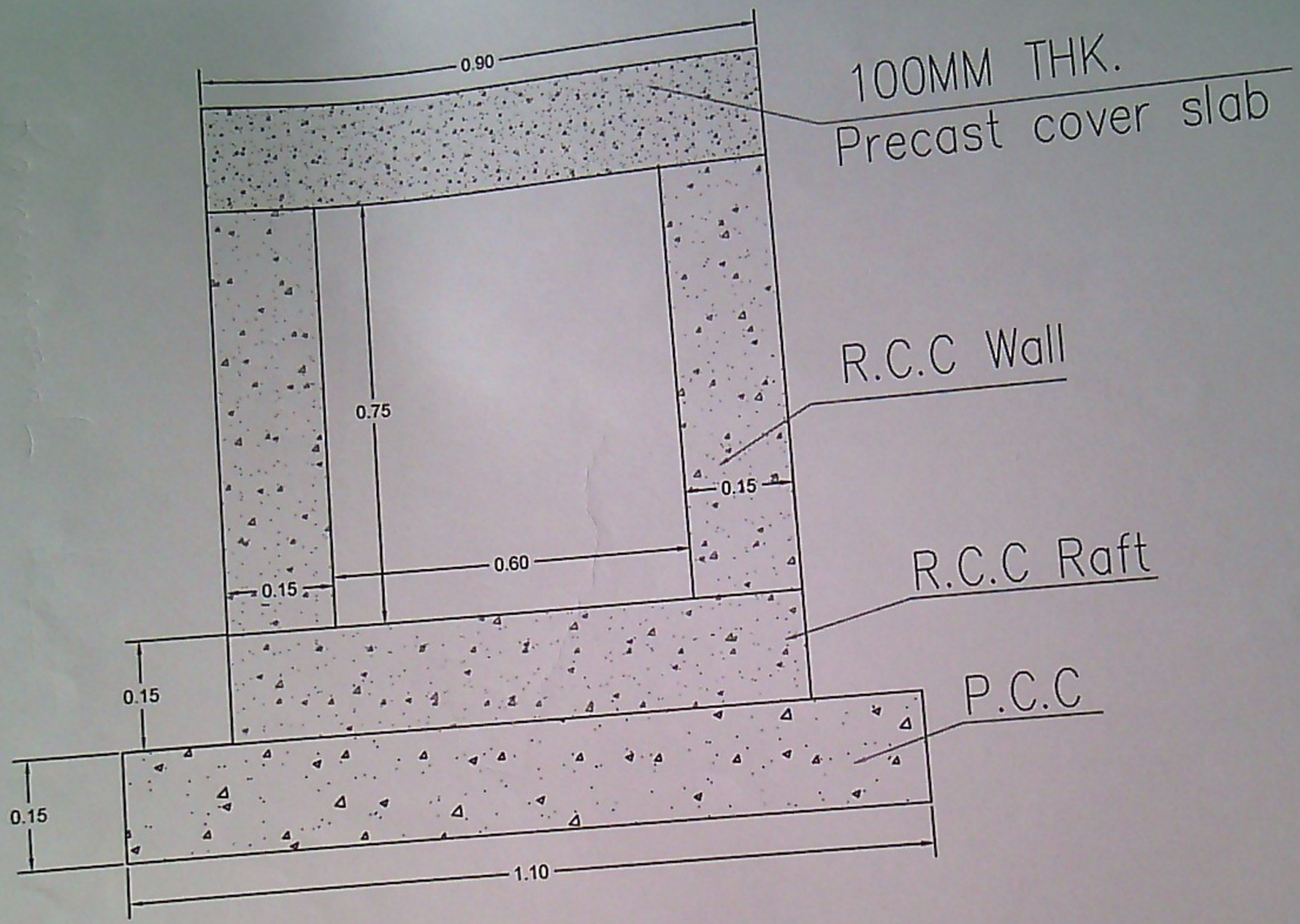
1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle 2018-2019, PRED, BWSSB, KPWD Electrical SR for year 2019-2020

TA CE (YNK)

Assistant Engineer
Ward No-04
BBMP Bangalore

Asst. Executive Engineer
Yelahanka New Town Sub Division
BBMP Bangalore

Executive Engineer,
Yelahanka Division
BBMP Bangalore



TYPICAL CROSS SECTION OF DRAIN

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-೧೦೬